

DEPARTMENT OF THE ARMY

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JUSTIFICATION OF ESTIMATES FOR AMENDED FY 1988/1989 BIENNIAL BUDGET

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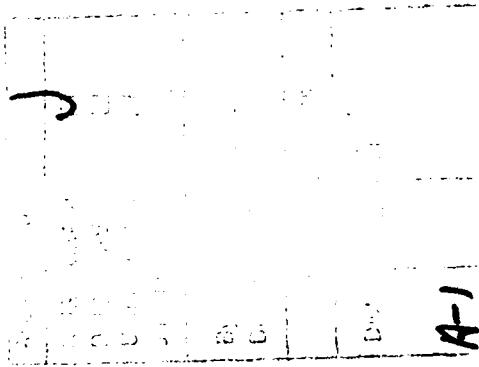
PROCUREMENT OF WTCV, ARMY PROGRAMS

AIRCRAFT	WEAPONS & TRACKED COMBAT VEHICLES	AMMUNITION	MISSILES	OTHER
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JUSTIFICATION OF ESTIMATES
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Chief of Engineers ATTN: CFCG 20 Massachusetts Ave Washington, D.C. 20314-1000	1	Program Manager, RCAS ATTN: AS-RCAS STTOP C-13, Bldg 1469 Ft. Belvoir, VA 22060-5436	1
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DEPARTMENT OF THE ARMY

PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES

JUSTIFICATION OF ESTIMATES FOR FISCAL YEAR 1989

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3-i FEBRUARY 1988

PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

Section 1

Budget Appendix Extract

Language

Program And Financing Schedule

Object Classification Schedule

3-1 FEBRUARY 1938

APPROPRIATION LANGUAGE

For construction, procurement, production, and modification of weapons and tracked combat vehicles, equipment, including ordnance, spare parts, and accessories therefor; specialized equipment and training devices; expansion of public and private plants, including the land necessary therefor, for the foregoing purposes, and such lands and interests therein may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes; \$2,960,600,000, of which \$133,200,000 shall be available for the Army National Guard and Army Reserve, to remain available for obligation until September 30, 1991. (10 USC 2353, 2361, 3013, 4531-32; Department of Defense Appropriations Act, 1988 as included in Public Law 101-202)

Army

Procurement of W&TCV, Army
Program and Financing (in Thousands of dollars) SUMMARY

Identification code	21-2033-0-1-051	Budget Plan (amounts for PROCUREMENT actions programmed)			Obligations	
		1987 actual	1988 est.	1989 est.	1987 actual	1988 est.
Program by activities:						
00.0101 Direct program:						
00.0101 Tracked combat vehicles	3,433,697	3,062,081	2,797,267	3,649,269	3,017,377	2,880,947
00.0201 Weapons and other combat vehicles	247,746	145,106	163,333	258,294	181,022	167,240
00.9101 Total direct program	3,680,843	3,207,187	2,960,600	3,907,563	3,198,399	3,048,187
01.0101 Reimbursable program	299,811	329,900	323,000	287,354	378,051	323,000
10.0001 Total	3,980,654	3,537,087	3,283,600	4,194,917	3,576,450	3,371,187
Financing:						
Offsetting collections from:						
11.0001 Federal funds (-)	-255,869	-260,500	-253,600	-248,664	-260,500	-253,600
13.0001 Trust funds (-)	-31,803	-69,400	-69,400	-28,963	-69,400	-69,400
14.0001 Non-Federal sources (-)	-12,139			-11,756		
17.0001 Recovery of prior year obligations				-337,253		
Unobligated balance available, start of year:						
21.4002 For completion of prior year budget plans	-380,750	-173,400	-173,400	-184,787	-1,098,205	-1,058,842
21.4003 Available to finance new budget plans	-199,144	59,700	59,700	-380,750	-173,400	
21.4007 Reprogramming from/to prior year budget plan	273,121			273,121	59,700	
22.4001 Unobligated balance transferred to other acc						
Unobligated balance available, end of year:						
24.4002 For completion of prior year budget plans	173,400			1,098,205	1,058,842	971,255
24.4003 Available to finance subsequent year budget	44,073			173,400	44,073	
25.0001 Unobligated balance lapsing						
39.0001 Budget authority	3,591,533	3,093,487	2,960,600	3,591,543	3,093,487	2,960,600
Budget authority:						
40.0001 Appropriation	3,804,300	3,207,187	2,960,600	3,804,300	3,207,187	2,960,600
40.0017 Appropriation rescinded	-213,300	-113,700		-213,300	-113,700	
42.0001 Transferred from other accounts	543			543		
43.0001 Appropriation (adjusted)	3,591,543	3,093,487	2,960,600	3,591,543	3,093,487	2,960,600
Relation of obligations to outlays:						
71.0001 Obligations incurred, net				3,905,534	3,246,550	3,048,187
72.4001 Obligated balance, start of year				6,668,986	6,100,787	6,097,137
74.4001 Obligated balance, end of year				-6,100,787	-6,097,137	-5,909,424
77.0001 Adjustments in expired accounts				36,592	-337,253	
78.0001 Adjustments in unexpired accounts						
90.0001 Outlays				4,173,073	3,250,200	3,235,900

3-3 FEBRUARY 1988

Army

Procurement of W&TCV, Army
Object Classification (in Thousands of dollars) SUMMARY

	Identification code	21-2033-0-1-051	1987 actual	1988 est.	1989 est.
Direct obligations:					
	Other services:				
125.004	Other	1,382,887	793,002	651,369	
126.001	Supplies and materials	543,542	504,638	414,507	
131.001	Equipment	1,981,134	1,900,759	1,982,311	
199.001	Total Direct obligations	3,907,563	3,198,399	3,048,187	
Reimbursable obligations:					
	Other services:				
225.004	Other	101,695	71,060	71,060	
226.001	Supplies and materials	39,971	45,220	45,220	
231.001	Equipment	145,688	261,771	206,720	
299.001	Total Reimbursable obligations	287,354	378,051	323,000	
999.901	Total obligations	4,194,917	3,576,450	3,371,187	

Procurement of W&CU, Army
Program and Financing (in thousands of dollars) FISCAL YEAR 1983

Identification code	21-2033-0-1-051	Budget Plan (amounts for PROCUREMENT actions programmed)			Obligations		
		1987 actual	1988 est.	1989 est.	1987 actual	1988 est.	1989 est.
Financing:							
17.0001	Recovery of prior year obligations						
21.4007	Unobligated balance available, start of year:						-71,416
22.4001	Reprogramming from/to prior year budget pia						-71,416
39.0001	Unobligated balance transferred to other acc						71,416
	Budget authority						

Army

Procurement of W&TCV, Army
Program and Financing (in thousands of dollars) FISCAL YEAR 1985

		Budget Plan (amounts for PROCUREMENT actions programmed)		Obligations		
Identification code	21-2033-01-051	1987 actual	1988 est.	1987 actual	1988 est.	1989 est.
Program by activities:						
Direct program:						
00.0101	Tracked combat vehicles			306,145		
00.0201	Weapons and other combat vehicles			40,241		
00.9101	Total direct program			346,386		
01.0101	Reimbursable program			2,487		
10.0001	Total			348,873		
Financing:						
Offsetting collections from:						
11.0001	Federal funds(-)			323		
13.0001	Trust funds(-)			1,288		
14.0001	Non-Federal sources(-)			5		
17.0001	Recovery of prior year obligations			-77,144		
Unobligated balance available, start of year:						
21.4002	For completion of prior year budget plans			-372,418		
21.4003	Available to finance new budget plans			-25,100		
21.4007	Reprogramming from/to prior year budget plan			99,073		
22.4001	Unobligated balance transferred to other acc			55,000		
25.0001	Unobligated balance lapsing			44,073		
40.0017	Budget authority (Appropriation rescinded)			-25,100		
				-25,100		

Army

Procurement of W8TCV, Army
Program and Financing (in Thousands of dollars) FISCAL YEAR 1986

		Budget Plan (amounts for PROCUREMENT actions programmed)		Obligations	
		1987 actual	1988 est.	1988 est.	1989 est.
Program by activities:					
Direct program:					
Tracked combat vehicles				622,124	252,262
Weapons and other combat vehicles				47,979	8,023
00.0101	Total direct program			670,102	260,285
00.0201					
00.9101	Reimbursable program			13,927	19,280
10.0001	Total			684,030	279,565
Financing:					
Offsetting collections from:					
11.0001	Federal funds (-)			6,682	
13.0001	Trust funds (-)			1,552	
14.0001	Non-Federal sources (-)			378	
17.0001	Recovery of prior year obligations			-188,693	
Unobligated balance available, start of year:					
21.4002	For completion of prior year budget plans			-812,369	-279,565
21.4003	Available to finance new budget plans			-355,650	-49,400
21.4007	Reprogramming from/to prior year budget plan			146,705	7,700
22.4001	Unobligated balance transferred to other acc				
Unobligated balance available, end of year:					
24.4002	For completion of prior year budget plans			279,565	
24.4003	Available to finance subsequent year budget			49,400	
40.0017	Budget authority (Appropriation rescinded)			-188,200	-41,700

3-7 FEBRUARY 1988

Army

Procurement of W&TCV, Army
Program and Financing (in Thousands of dollars) FISCAL YEAR 1987

Identification code	21-2033-0-1-051	Budget Plan (amounts for PROCUREMENT actions programmed)			Obligations		
		1987 actual	1988 est.	1989 est.	1988 actual	1988 est.	1989 est.
Program by activities:							
00.0101	Direct program.	3,433,097	2,721,000	432,309	279,788		
00.0201	Tracked combat vehicles weapons and other combat vehicles	247,746	170,074	59,091	18,581		
00.9101	Total direct program	3,680,843	-	-	-	-	-
01.0101	Reimbursable program	299,811	2,891,074	491,400	298,369		
10.0001	Total	3,980,654	270,940	28,871	270,940	28,871	
			3,162,014	520,271	298,369		
Financing:							
	Offsetting collections from:						
11.0001	Federal funds (-)	255,869	-255,869				
13.0001	Trust funds (-)	31,803	-31,803				
14.0001	Non-Federal sources(-)	-12,139	-12,139				
	Unobligated balance available, start of year:						
21.4002	For completion of prior year budget plans	-124,000	-818,640				
21.4003	Available to finance new budget plans	52,000	-124,000				
22.4001	Unobligated balance transferred to other acc		52,000				
	Unobligated balance available, end of year:						
24.4002	For completion of prior year budget plans	124,000	818,640				
24.4003	Available to finance subsequent year budget	124,000	124,000				
39.0001	Budget authority	3,804,843	-72,000	-72,000	3,804,843	-72,000	
	Budget authority:						
40.0001	Appropriation	3,804,300	-72,000	-72,000	3,804,300	-72,000	
40.0017	Appropriation rescinded	543	543	543	543	543	
42.0001	Transferred from other accounts	-	-	-	-	-	-
43.0001	Appropriation (adjusted)	3,804,843	-72,000	-72,000	3,804,843	-72,000	

Army

Procurement of W&TCV, Army
Program and Financing (in Thousands of dollars) FISCAL YEAR 1988

		Budget Plan (amounts for PROCUREMENT actions programmed)		Obligations	
Identification code	21-2033-0-1-051	1987 actual	1988 est.	1987 actual	1988 est.
Program by activities:					
Direct program:					
00.0101	Tracked combat vehicles	3,062,081	-	2,332,806	474,749
00.0201	Weapons and other combat vehicles	145,106	-	113,908	20,443
00.9101	Total direct program	3,207,187	-	2,446,714	495,192
01.0101	Reimbursable program	329,900	-	329,900	-
10.0001	Total	3,537,087	-	2,776,614	495,192
Financing:					
Offsetting collections from:					
11.0001	Federal funds (-)	-260,500	-	-260,500	-
13.0001	Trust funds (-)	-69,400	-	-69,400	-
Unobligated balance available, start of year:					
21.4002	For completion of prior year budget plans		-	-760,473	-
24.4002	Unobligated balance available, end of year: For completion of prior year budget plans		-	760,473	265,281
40.0001	Budget authority (Appropriation)	3,207,187	-	3,207,187	-

Army

Procurement of W&TCV, Army
Program and Financing (in Thousands of dollars) FISCAL YEAR 1989

		Budget Plan (amounts for PROCUREMENT actions programmed)		Obligations	
		1987 actual	1988 est.	1987 est.	1988 actual
Identification code	21-2033-0-1-051				
Program by activities:					
Direct program:					
00.0101 Tracked combat vehicles		2,797,267			2,126,410
00.0201 Weapons and other combat vehicles		163,333			128,216
00.9101 Total direct program			2,960,600		
01.0101 Reimbursable program			323,000		2,254,626
10.0001 Total			3,283,600		323,000
Financing:					
Offsetting collections from:					
11.0001 Federal funds(-)		-253,600			-253,600
13.0001 Trust funds(-)		-69,400			-69,400
24.40002 Unobligated balance available, end of year: For completion of prior year budget plans				705,974	
40.00001 Budget authority (Appropriation)			2,960,600		2,960,600

3-10 FEBRUARY 1988

PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

Section 2

Budget Activity Justification

Activity 1 - Tracked Combat Vehicles

Activity 2 - Weapons and Other Combat Vehicles

Department of the Army Annual Budget Estimate	Appropriation PROCUREMENT OF WEAPONS & TRACKED COMBAT VEHICLES, ARMY			FY 1989
Program or Budget Project Account	Actual	Estimate	Initial	Budget
Activity 1 - Tracked Combat Vehicles	FY 1987	FY 1988	Change	Amended Estimate
Direct Obligation or Direct Budget Plan	\$3,433,097	\$3,062,081	FY 1989	FY 1989
			\$3,022,729	\$2,797,267

Section 1 - PURPOSE AND SCOPE

Provide for procurement of tracked combat vehicles including M1A1 tanks; Bradley Fighting Vehicle System; training equipment; and associated equipment. The request also provides for modification kits (M109 Howitzer Improvement Program), major assembly repair parts (including initial provisioning), and related production base support.

Section 2 - JUSTIFICATION OF FUNDS REQUESTED

Tracked Combat Vehicles - The requested funding provides for procurement of the following tracked combat vehicles to improve readiness and meet modernization goals: M1A1 Abrams Tank, Bradley Fighting Vehicle System, and M88 Recovery Vehicle. To further improve Army materiel readiness of high priority combat vehicles, funds are requested for the following modification programs : Upgrade of the current fleet of M113 family of carriers, enhancement of M109 Self-Propelled Howitzers, upgrade of M60A1 tanks to M60A3 configuration with survivability enhancements, and retrofit of Bradley Fighting Vehicle System with preplanned product improvements. Each major item included in this request is discussed below:

Bradley Fighting Vehicles (MYP) (P-1 Line Item No. 2):

(\$ in thousands)	
FY 1988	FY 1989
<u>\$681,000</u>	<u>\$682,200</u>

These funds are requested for procurement of 581 Bradley Fighting Vehicles in FY89. The Bradley is indispensable to the Mechanized Infantry and Cavalry forces and is designed to be compatible with the M1 Main Battle Tank. It provides improved firepower, cross-country mobility, and ballistic protection to infantry squads and cavalry sections. The armament is designed to engage an array of enemy targets and will include a two-man turret employing a 25mm automatic cannon, the TOW 2 antitank guided missile system, as well as a 7.62mm coaxial machinegun, all utilizing an integrated day/night thermal sight. Using the organic 5.56mm firing port weapon, the mounted infantry in the Infantry Fighting Vehicle will be able to deliver suppressive fires around the vehicle. Interior configuration varies in the Cavalry Fighting Vehicle to allow for differences in crew size and stowage requirements and will allow for better visibility. All vehicles procured will be A2 versions which incorporate the more lethal TOW 2 system, survivability enhancements, and other design changes.

Advance Procurement - Bradley Fighting Vehicles (MYP) (P-1 Line Item No. 3):

	(\$ in Thousands)
FY 1988	<u>FY 1989</u>
\$35,500	<u>\$31,800</u>

These funds are requested for procurement of long-lead manufacturing items and components to support the production of Infantry and Cavalry Fighting Vehicles.

Bradley Fighting Vehicle System Training Devices (Mod) (P-1 Line Item No. 5):

	(\$ in Thousands)
FY 1988	<u>FY 1989</u>
\$5,900	<u>\$3,800</u>

Funds support modification of training devices to maintain continuity with vehicle modifications, e.g., update of Conduct of Fire Trainer to reflect A1 modifications.

Field Artillery Ammunition Support Vehicle (FAASV) (P-1 Line Item No. 6):

	(\$ in Thousands)
FY 1988	<u>FY 1989</u>
\$28,700	<u>-0-</u>

These funds were appropriated to continue procurement of the Field Artillery Ammunition Support Vehicle for deployment in M109 155MM Self-Propelled Howitzer Battalions in Europe and Korea and POMCUS. The FY88 funds will procure 48 FAASVs.

Recovery Vehicle, Medium, FT, M88A2 (P-1 Line Item No. 7):

	(\$ in Thousands)
FY 1988	<u>FY 1989</u>
-0-	<u>\$83,800</u>

These funds are requested for initial procurement of 80 M88A2 production vehicles in FY89 to provide a battlefield recovery and evacuation capability to M1A1 tank units.

Advance Procurement - Recovery Vehicle, Medium, FT, M88A2 (P-1 Line Item No. 8):

	(\$ in Thousands)
FY 1988	<u>FY 1989</u>
\$24,100	<u>\$22,300</u>

These funds are required to support an aggressive, tailored production schedule that begins in September 1989. This schedule allows the Army to transition from a warm production base and accept reductions in costs and time as a result.

M1 Abrams Tank (MYP) (P-1 Line Item No. 9):

(\$ in Thousands)

<u>FY 1988</u>	<u>FY 1989</u>
<u>\$1,451,150</u>	<u>\$1,131,600</u>

These funds are requested to procure 545 M1A1 tanks in FY89. The M1A1 Tank will replace the M60 and M1 tanks in selected units and allow for continued modernization of the Army tank fleet. It has significantly improved survivability over current tanks providing better armor protection and compartmentalization of ammunition and fuel. Its 1500 hp turbine engine and improved suspension system provide unprecedented mobility and stability as a weapons platform. The M1A1 counters the enemy threat now and has growth potential to be effective well into the 1990's.

Advance Procurement, Tank, Combat, M1 Abrams (MYP) (P-1 Line Item No. 10):

(\$ in Thousands)

<u>FY 1988</u>	<u>FY 1989</u>
<u>\$166,000</u>	<u>\$212,100</u>

These funds are requested for procurement of long-lead manufacturing items, components, and government-furnished equipment to support the production of M1A1 tanks in FY90.

M60 Series Tank Training Devices (P-1 Line Item No. 11):

(\$ in Thousands)

<u>FY 1988</u>	<u>FY 1989</u>
<u>-0-</u>	<u>\$14,500</u>

These funds are requested for procurement of Mobile Conduct of Fire Trainers (MCOFT) to sustain tank gunnery skills in reserve component units. These devices employ an M60A3 gunner and commander station mock-up and computer simulations to produce a wide variety of highly realistic battle scenarios. Although not a total substitute for actual firing, the Conduct of Fire Trainers will significantly assist in acquiring and sustaining gunner and commander basic gunnery skills with reductions in time, range usage, ammunition, and attendant cost.

M1 Series Tank Training Devices (P-1 Line Item No. 12):

	(\$ in Thousands)	
	FY 1988	FY 1989
	<u>\$4,700</u>	<u>-0-</u>

These funds were appropriated for procurement of Maintenance Trainers and M1 Mobile Conduct of Fire Trainers. Maintenance Trainers provide initial fault isolation and repair procedures training for M1 mechanics in reserve component intermediate maintenance units. Those trainers will be utilized at regional training sites for the reserve component. MCFOFTs provide reserve component forces equipped with the M1 tanks an inexpensive means to sustain gunnery skills using training simulators similar in description to the M60A3 COFT.

Carrier, Modification (MOD) (P-1 Line Item No. 13):

	(\$ in Thousands)	
	FY 1988	FY 1989
	<u>\$36,300</u>	<u>\$38,500</u>

These funds are requested for design engineering, testing and procurement of kit hardware necessary to upgrade the M113A1/A2 carrier fleet. Funds requested in FY89 will continue to buy the Block I Mod survivability upgrade kits (spall suppression liners, RISE power train, armored external fuel tanks and armor attachment point) and cooling and suspension kits. Funds will also continue the Block II survivability enhancement modification (applique armor).

Bradley Fighting Vehicle System (Mod) (P-1 Line Item No. 15):

	(\$ in Thousands)	
	FY 1988	FY 1989
	<u>\$45,100</u>	<u>\$62,900</u>

These funds are requested to continue retrofit of BFVS Preplanned Product Improvements which were introduced in FY85 and survivability improvements to the M2/M3A1.

Howitzer, Medium, SP, 155mm, M109 Series (Mod) (P-1 Line Item No. 16):

	(\$ in Thousands)	
	FY 1988	FY 1989
	<u>\$1,374</u>	<u>\$30,000</u>

FY89 funds are requested for procurement of Howitzer Improvement Program (HIP) kits. These modifications are designed to improve the readiness and survivability of M109 series howitzers.

Howitzer, Medium, SP, 155mm, M109 Series (Mod) (P-1 Line Item No. 17):

(\$ in Thousands)	
FY 1988	FY 1989
<u>\$12,726</u>	<u>-0-</u>

These funds were appropriated to provide for a smooth production start and workforce considerations, in support of the M109 Howitzer Improvement Program.

Tank, Combat, FT, 105mm Gun, M60 Series (Mod) (P-1 Line Item No. 18):

(\$ in Thousands)	
FY 1988	FY 1989
<u>\$80,100</u>	<u>\$9,900</u>

These funds are requested to procure modification kits to improve the survivability of the M60A3 tank fleet. Modifications that will be applied include tank thermal sight optical performance enhancement (RTS-OPE) and laser protection.

Tank, M1 Series (Mod) (P-1 Line Item No. 19):

(\$ in Thousands)	
FY 1988	FY 1989
<u>\$30,200</u>	<u>-0-</u>

These funds were appropriated for mine roller adapter kits, laser protection for crew, optical performance enhancement, auxiliary power unit retrofit, and maintainability enhancement.

9MM (P-1 Line Item No. 20):

(\$ in Thousands)	
FY 1988	FY 1989
<u>\$700</u>	<u>\$600</u>

These funds are requested to procure equipment for a classified project.

Host Nation Support (P-1 Line Item No. 22):

	(\$ in Thousands)
FY 1988	<u>FY 1989</u>
\$29,700	<u>\$13,038</u>

These funds are requested to procure German-manufactured crew served weapons to equip German Reserve Forces which will provide dedicated combat support/combat service support to US Forces under the terms and conditions of the 1982 US-German Wartime Host Nation Support Agreement.

Spares and Repair Parts (TCV) (P-1 Line Item No. 23):

	(\$ in Thousands)
FY 1988	<u>FY 1989</u>
\$381,100	<u>\$400,500</u>

These funds are requested for procurement of initial and replenishment spares and repair parts related to tracked combat vehicles. Initial spares are requested to support the following systems:

System	FY 1988	FY 1989
M1 Abrams Tank	<u>\$74,295</u>	<u>\$80,733</u>
Bradley Fighting Vehicle System	27,000	16,000
Howitzer, Med, M109, (Mod)	600	1,200
	<u>\$101,895</u>	<u>\$97,933</u>

Replenishment spares and repair parts are requested in the amount of \$302,567 for FY 1989.

Items Less Than \$2 Million (TCV-WTCV) (P-1 Line Item No. 24):

	(\$ in Thousands)
FY 1988	<u>FY 1989</u>
\$1,900	<u>\$2,700</u>

Funds are requested for procurement of maintenance and repair equipment for tracked combat vehicles. Equipment to be procured includes shop sets and tool kits.

Production Base Support (TCV-WTCV) (-1 Line Item No. 25):

(\$ in Thousands)	
<u>FY 1988</u>	<u>FY 1989</u>
<u>\$28,731</u>	<u>\$40,829</u>

These funds are requested to rehabilitate/replace Industrial Plant Equipment at M1A1 Tank production facilities; to modernize the Mainz Army Depot facilities; to layaway/dispose of industrial equipment excess to current production requirements; to provide replacement depot maintenance plant equipment at Mainz Army Depot; and to provide initial depot maintenance plant equipment to support the M1A1 Tank, Bradley Fighting Vehicle System, M60A3 Tank and M8A1 Recovery Vehicle.

<u>PROVISION OF INDUSTRIAL FACILITIES (PIF)</u>	
<u>Project #</u>	<u>Title</u>
G8x2006	Expansion of Mainz Army Depot
48x3002	Omnibus Concept/Final Design of Construction Projects
48x6036	Production Support for Detroit Arsenal Tank Plant
48x6037	Production Support at Lima Army Tank Plant
L8x6040	Omnibus Production Support and Equipment Rehabilitation/Replacement at M1 Production Facilities
18x8174	Production Support at Stratford Army Engine Plant
18x8175	Design of Construction Projects at Stratford Army Engine Plant
	<u>TOTAL PROVISION OF INDUSTRIAL FACILITIES (TCV)</u>
	14,400

LAYAWAY OF INDUSTRIAL FACILITIES (LIF)
48x4281 Omnibus Packaging, Handling and Transportation of Excess Equipment

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<u>DEPOT MAINTENANCE PLANT EQUIPMENT (DMPE)</u>	
G8X0020	Equipment Replacement at Mainz Army Depot
G8X0053	Omnibus Support of Miscellaneous Tracked Combat Vehicles
G8X0153	Omnibus Support of M1 Tank
G8X0253	Omnibus Support of Bradley Fighting Vehicle
	<u>TOTAL DEPOT MAINTENANCE PLANT EQUIPMENT (TCV)</u>
	14,200

<u>TOTAL PRODUCTION BASE SUPPORT (TCV)</u>	
28,731	40,829

Regional Maintenance Training Sites (P-1 Line Item No. 26):

(**\$ in Thousands**)

	FY 1988	FY 1989
\$17,100		\$16,200

These funds will procure system components (e.g., M1 engines, M2 transmissions, M60A3 engines) to support training at Regional Maintenance Training Sites. System component requirements are as specified in Programs-of-Instruction. These funds will outfit all nineteen Regional Maintenance Training Sites to minimum Program-of-Instruction standards.

Department of the Army Annual Budget Estimate		APPROPRIATION OF WEAPONS & TRACKED COMBAT VEHICLES, ARMY						FY 1989
Program or Budget	Project Account	Actual	Estimate	Initial Estimate	Change Estimate	FY 1989	FY 1989	Budget Amended
Activity 2 - Weapons and Other Combat Vehicles		FY 1987	FY 1988	FY 1989	FY 1989	FY 1989	FY 1989	FY 1989
Direct Obligation or Direct Budget Plan	\$247,746	\$145,106	\$205,033	\$-41,700		\$163,333		

Section 1 - PURPOSE AND SCOPE

Provides for procurement of weapons and other combat vehicles including mortars, machine guns, and associated equipment. The request also provides for modification kits, procurement of depot repairable major assembly repair parts (including initial provisioning), related production base support, and depot maintenance plant equipment.

Section 2 - JUSTIFICATION OF FUNDS REQUESTED

Weapons and Other Combat Vehicles - The requested funding level provides for continued procurement of the Vehicle Rapid Fire Weapon System (VRFWS) weapons, VRFWS advance procurement, Smoke Grenade Launcher, M119 Light Howitzer, and the Mk19 Grenade Launcher. Funding is also requested for the procurement of the 9mm Personal Defense Weapon, and Squad Automatic Weapon (SAW). Each of the items included in this request is discussed below:

Howitzer, Light Towed, 105mm M'19 (P-1 Line Item No. 28):

(\$ in Thousands)	
FY 1988	FY 1989
\$29,900	\$28,800

These funds are requested for the procurement of 88 howitzers in FY89. This light howitzer provides increased range and lethality for the light divisions over that of the old 105mm models.

Squad Automatic Weapon (SAW) 5.56mm (P-1 Line Item No. 31):

(\$ in Thousands)	
FY 1988	FY 1989
\$12,100	\$11,500

These funds are requested for the procurement of 5175 Squad Automatic Weapons in FY89. This lightweight machine gun delivers a high rate of sustained fire and has increased range which will greatly enhance the effectiveness of the infantry rifle squad.

Grenade Launcher, 40mm, Mk 19-3 (P-1 Line Item No. 32):

(\$ in Thousands)	
FY 1988	FY 1989
<u>\$1,000</u>	<u>\$12,000</u>

These funds are requested for the procurement of 800 Mk 19-3 Grenade Launchers in FY89. This grenade machine gun delivers high explosive anti-personnel and anti-light armor grenades to 2200 meters which greatly enhances the firepower of the infantry platoon and combat service support units.

Launcher, Smoke Grenade (P-1 Line Item No. 33):

(\$ in Thousands)	
FY 1988	FY 1989
<u>\$1,900</u>	<u>\$1,600</u>

These funds are requested to continue procurement of protective smoke systems for combat vehicles. The launcher provides near instantaneous smoke protection and is a defensive aid against antitank missiles. The budget procures 2435 in FY89.

Rifle, 5.56mm, M16A2 (P-1 Line Item No. 36):

(\$ in Thousands)	
FY 1988	FY 1989
<u>\$26,100</u>	<u>\$22,300</u>

These funds are requested for procurement of 49,800 rifles in FY89. The M16A2, an improved version, will be placed in the hands of the front line combat soldiers. The M16A2 incorporates improvements in sights, pistol grip, stock, and overall combat effectiveness. The US Marine Corps is also procuring the M16A2 rifle.

Sniper Weapon System (P-1 Line Item No. 37):

(\$ in Thousands)	
FY 1988	FY 1989
<u>\$1,900</u>	<u>\$1,900</u>

These funds are requested for procurement of 500 Sniper Weapon Systems in FY89. The Sniper Weapon System provides long range, precision firepower for Special Operations Forces and Infantry battalions.

9mm Personal Defense Weapon (PDW) (P-1 Line Item No. 38):

(\$ in Thousands)	
FY 1988	FY 1989
<u>\$5,300</u>	<u>\$7,000</u>

These funds are requested for procurement of 33,078 9mm handguns in FY89. FY85 was the first year of a ten year Army procurement of new 9mm handguns to standardize the inventory and replace the M1911A caliber .45 handguns and •38 revolvers. The 9mm handgun also enhances NATO Rationalization, Standardization, and Interoperability (RSI) efforts.

Vehicle Rapid Fire Weapon System (Bushmaster) (MYP) (P-1 Line Item No. 39):

(\$ in Thousands)

	FY 1988	FY 1989
	\$22,400	\$29,500

These funds are requested for the procurement of 853 25mm Vehicle Rapid Fire Weapon Systems in FY89. This weapon system, also known as the Bushmaster, is the primary armament for the Bradley Fighting Vehicle. FY89 is the 4th increment of a 5 year multiyear procurement.

Advance Procurement, Vehicle Rapid Fire Weapon System (Bushmaster) (P-1 Line Item No. 40):

(\$ in Thousands)

	FY 1988	FY 1989
	\$2,100	\$2,400

These funds are requested for long-lead castings, forgings, and economic order quantity materials to support the Vehicle Rapid Fire Weapon System.

M16A1 Rifle Mods (P-1 Line Item No. 41):

(\$ in Thousands)

	FY 1988	FY 1989
	\$5,400	\$1,800

These funds are requested to support the Army rebuild program for the M16A1 rifle. M16A1 rifles will be rebuilt to the Army standard M16A2 configuration.

Modifications Under \$2 Million (WOCV-WTCV) (P-1 Line Item No. 42):

(\$ in Thousands)

	FY 1988	FY 1989
	\$4,500	\$4,500

These funds are requested for minor modifications of weapons and other combat vehicles with a cost less than \$2.0 Million. Included are minor modifications to the M198 Howitzer, M249 Machine Gun, and Vulcan Air Defense System.

Spares and Repair Parts (MOCV-MTCV) (P-1 Line Item No. 43):

	(\$ in Thousands)
	<u>FY 1988</u>
	<u>FY 1989</u>
	<u>\$12,500</u>
	<u>\$26,500</u>

These funds are requested for initial and replenishment spares and repair parts related to weapons and other combat vehicles. Initial spares are requested to support the following systems:

<u>System</u>	<u>FY 1988</u>	<u>FY 1989</u>
Howitzer, Light, Towed, 105mm, M119	\$900	\$2,600

Replenishment spares and repair parts costing \$23,900 are requested for FY89.

Items Less than \$2 Million (P-1 Line Item No. 44):

	(\$ in Thousands)
	<u>FY 1988</u>
	<u>FY 1989</u>
	<u>\$3,300</u>
	<u>\$4,200</u>

These funds are requested for procurement of shop sets and tool sets for maintenance and repair of weapons and other combat vehicles.

Production Base Support (P-1 Line Item No. 45):

(\$ in Thousands)		
<u>FY 1988</u>	<u>FY 1989</u>	
		<u>\$16,706</u>
		<u>\$9,333</u>

These funds are requested to complete the Renovation of Armament Manufacturing (REARM) at Rock Island Arsenal; to provide annual support of the production test facilities; to layaway industrial equipment excess to production requirements; and to provide depot maintenance plant equipment to support the Squad Automatic Weapon and Howitzer Programs.

<u>PROJECT #</u>	<u>TITLE</u>	<u>FY 1988</u>	<u>FY 1989</u>
PROVISION OF INDUSTRIAL FACILITIES (PIF)			
68x8129	Renovation of Armament Manufacturing at Rock Island Arsenal	\$8,100	\$ 0
08x5263	Support of Production Test Facilities at Aberdeen Proving Grounds	2,000	2,590
08x5268	Support of Production Test Facilities at Yuma Proving Grounds	1,400	500
68x6986	Support of Production Test Facilities at Ethan Allen Firing Range	500	300
68x8224	Production Test Equipment at Armament Research & Development Center	100	400
68x9035	Initial Production Facilities for Howitzer Improvement Program Gun Mounts	0	1,001
TOTAL PROVISION OF INDUSTRIAL FACILITIES (WOCV)		12,100	4,791
LAYAWAY OF INDUSTRIAL FACILITIES (LIF)			
68x7666	Omnibus Project for Layaway and/or Redistribution of Government-owned Equipment	3,306	3,542
DEPOT MAINTENANCE PLANT EQUIPMENT (DMPE)			
G8x0054	Omnibus Support of Miscellaneous Weapons and Other Combat Vehicles	1,300	1,000
TOTAL PRODUCTION BASE SUPPORT (WEAPONS & OTHER COMBAT VEHICLES)		16,706	9,333

PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

Section 3

Comparison of Program Requirements and Financing

Comparison of FY 88 program requirements as reflected in the FY 88/89 Budget with FY 88 program requirements as shown in the FY 89 Amended Budget.

Comparison of FY 88 financing as reflected in the FY 88/89 Budget with FY 88 financing as shown in the FY 89 Amended Budget.

Comparison of FY 87 program requirements as reflected in the FY 88/89 Budget with FY 87 program requirements as shown in the FY 89 Amended Budget.

Comparison of FY 87 financing as reflected in the FY 88/89 Budget with FY 87 financing as shown in the FY 89 Amended Budget.

**COMPARISON OF FY 1988 PROGRAM REQUIREMENTS
AS REFLECTED IN THE FY 1988/1989 BUDGET WITH
PROGRAM REQUIREMENTS AS SHOWN IN THE FY 1989 AMENDED BUDGET**

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

Appropriation: PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES	SUMMARY OF REQUIREMENTS (In Thousands of Dollars)			Increase (+) or Decrease (-)
	Total Program	Program Requirements Per FY88/89 Budget	Program Requirements Per FY89 Amended Budget	
	Requirements Per FY88/89 Budget	Per FY89 Amended Budget	Decrease (-)	
Activity 1 - Tracked Combat Vehicles.....	2,970,831	3,062,081	+ 91,250	
Activity 2 - Weapons and Other Combat Vehicles.	<u>181,706</u> <u>3,152,537</u>	<u>145,106</u> <u>3,207,187</u>	<u>- 36,600</u> <u>+ 54,650</u>	

EXPLANATION BY ACTIVITY

Activity 1 - Tracked Combat Vehicles: A net increase of \$91.3 Million resulted from Congressional Action and transfers.

<u>Item</u>	<u>Net Change (\$ in Thousands)</u>
Congressional Action.....	\$ +91,750
Transfers.....	- 500
TOTAL NET CHANGE	+91,250

Activity 2 - Weapons and Other Combat Vehicles: A net decrease of \$36.6 Million resulted from Congressional Action and Transfers.

<u>Item</u>	<u>Net Change (\$ in Thousands)</u>
Congressional Action.....	\$ -37,100
Transfers.....	+ 500
TOTAL NET CHANGE	-36,600

**COMPARISON OF FY 1988 FINANCING AS REFLECTED
IN THE FY 1988/1989 BUDGET WITH FINANCING
AS SHOWN IN THE FY 1989 AMENDED BUDGET**

Appropriation: PROCUREMENT OF WEAPONS & TRACKED COMBAT VEHICLES	(In Thousands of Dollars)		
	Financing Per FY88/89 Budget	Financing Per FY89 Amended Budget	Increase (+) or Decrease (-)
Unobligated balance available, start of year:			
Available to finance new budget plans.....	0	-173,400	-173,400
Unobligated balance transferred to other accounts.....	0	+ 59,700	+ 59,700

Explanation of Differences:

Unobligated balance available, start of year - available to finance new budget plans changes because of FY 1986 and FY 1987 recessions contained in the FY 1988 Appropriations Act.

Unobligated balance transferred to other accounts changes due to new reprogrammings in FY 1986 and FY 1987.

**COMPARISON OF FY 1987 PROGRAM REQUIREMENTS
AS REFLECTED IN THE FY 1988/1989 BUDGET WITH
PROGRAM REQUIREMENTS AS SHOWN IN THE FY 1989 AMENDED BUDGET**

SUMMARY OF REQUIREMENTS (In Thousands of Dollars)

<u>Appropriation:</u> <u>PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES</u>	Total Program	Program Requirements Per FY88/89 Budget	Program Requirements Per FY89 Amended Budget	Increase (+) or Decrease (-)
	Requirements Per FY88/89 Budget	Amended Budget	Decrease (-)	
Activity 1 - Tracked Combat Vehicles.....	3,508,247	3,433,097	- 75,150	
Activity 2 - Weapons and Other Combat Vehicles.	<u>236,623</u>	<u>247,746</u>	+ 11,093	
	<u><u>3,744,900</u></u>	<u><u>3,680,843</u></u>	<u><u>- 64,057</u></u>	

EXPLANATION BY ACTIVITY

Activity 1 - Tracked Combat Vehicles: A net decrease of \$75.15 Million resulted from Congressional actions, transfers, and actual reprogramming to other accounts being different than the estimates in the FY 1988/89 Budget. Shown below are specific changes by program:

<u>Item</u>	<u>Net Change (\$ in Thousands)</u>
Recessions.....	- 72,000
Transfers to/from other accounts.....	- 3,150
Carrier, Command Post M577.....	(+ 13,000)
Bradley Fighting Vehicle System.....	(- 3,400)
Field Artillery Ammunition Support Vehicle.....	(+ 2,334)
M1A1 Abrams Tank.....	(- 6,400)
Bradley Fighting Vehicle System Mods.....	(+ 3,000)
M109 Howitzer Mods.....	(+ 6,505)
M1 Abrams Tank Mods.....	(- 4,989)
Spares and Repair Parts - TCV.....	(- 12,584)
Miscellaneous TCV.....	(- 616)
TOTAL NET CHANGE	- 75,150

**COMPARISON OF FY 1987 PROGRAM REQUIREMENTS
AS REFLECTED IN THE FY 1988/1989 BUDGET WITH
PROGRAM REQUIREMENTS AS SHOWN IN THE FY 1989 AMENDED BUDGET**

Appropriation: PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES	SUMMARY OF REQUIREMENTS (In Thousands of Dollars)			Increase (+) or Decrease (-)
	Total Program Requirements Per FY88/89 Budget	Program Requirements Per FY89 Amended Budget	Budget Decrease (-)	
Activity 2 - Weapons and Other Combat Vehicles: A net increase of \$11.1 Million resulted from transfers and actual reprogrammings being different than the estimates in the FY 1988/1989 Budget. Shown below are specific changes by program:				
Item				<u>Net Change (\$ in Thousands)</u>
Transfers to/from other accounts				
M119 Light Howitzer.....		+ 11,093		
M16A2 Rifle.....		(+ 9,803)		
Bushmaster.....		(- 1,389)		
M16A1 Rifle Mods.....		(- 3,062)		
Miscellaneous WOCV.....		(- 1,714)		
Spares and Repair Parts.....		(+ 255)		
		(+ 7,200)		
TOTAL NET CHANGE		11,093		

**COMPARISON OF FY 1987 FINANCING AS REFLECTED
IN THE FY 1988/1989 BUDGET WITH FINANCING
AS SHOWN IN THE FY 1989 AMENDED BUDGET**

Appropriation: PROCUREMENT OF WEAPONS & TRACKED COMBAT VEHICLES	(In Thousands of Dollars)		
	Financing Per FY 1987 Budget	Financing Per FY 1987 Amended Budget	Increase (+) or Decrease (-)
Offsetting Collections	-366,000	-299,811	+ 66,189
Unobligated Balance Available Start of Year:			
Available to Finance New Budget Plans	-380,750	-380,750	0
Reprogramming from/to Prior Year Budget Plan	0	-199,144	-199,144
Unobligated Balance Transferred to Other Accounts	167,450	273,121	+105,671
Unobligated Balance Rescinded: Appropriation	213,300	0	-213,300
Unobligated Balance Available, End of Year:			
Available to Finance Subsequent Year Budget	0	173,400	+ 173,400
Unobligated Balance Lapsing	0	44,073	+ 44,073

EXPLANATION JF DIFFERENCES

Reimbursement Program (offsetting collections) actual orders were less than projected for both categories other than Foreign sales which showed a slight increase.

Unobligated balances available, start of year, changes because of a large FY83 reprogram for Foreign Currency Fluctuation, a large FY 85 new reprogramming to support military pay and the operating accounts, and a modest change in FY 86 reprogrammings.

The unobligated balances rescinded represent FY85 and FY86 from the FY87 Appropriation Act. Because of changes in the application of the treasury code structure this rescission is now spread among the other sub elements.

The unobligated balance available, end of year increase, resulted from FY86 and FY87 recessions in the FY88 Appropriations Act.

The FY85 appropriation lapsed \$44,073 at the end of FY87.

